

PHENIX

WEEKLY PLANNING

8/9/2007

Don Lynch

2007 Summer Shutdown Schedule

<u>Item</u>	<u>Start</u>	<u>Complete</u>
RPC Factory set up	Started	2011?
HBD West repair	Started	9/30?
MuID collar removal, MMS move S.	Done	Done
Disconnect EC and Move to AH	Done	Done
C-A fold scaffolding, remove lift & ladder, disconnect gas sniffers	Done	Done
PHENIX techs disconnect water, elect., gas, fibers, RXNP blue cable		
Mike Rau remove lift wiring, disconnect TOF blower	Done	Done
Move EC to AH	Done	Done

Note: C-A Cooling water improvements are planned for this summer. This may involve interruption of water cooling for most/all of the summer. Please let me know if water cooling is necessary for any subsystem operations this summer.

2007 Summer Shutdown Schedule

RPC Engineers coordination visit	Done	Done
Reconnect EC for maintenance in AH	Done	Done
Move MuID collar to AH	Done	Done
Misc. Subsystem Maint./repair/Upgrade	In Progress	10/1
Misc. Infrastructure Improvements	In Progress	10/1
Install IR floor plates, rolling cart & move manlift to IR	Done	Done
Remove MPC South (wp needed)	Done	Done
MPC South upgrade/ bench tests	In Progress	9/20
Remove SouthEast Vertical Lampshade	Done	Done
Move CM south	8/13	8/13
Remove MPC North (wp needed)	8/13	9/20
MPC North upgrade/bench tests	8/13	9/20
MuTr Capacitor Decap (wp needed))	Started	9/30

T
e
c
h
n
i
c
a
l

S
u
p
p
o
r
t

+

2
0
0
7

2007 Summer Shutdown Schedule (cont'd)

T
e
c
h
n
i
c
a
l

S
u
p
p
o
r
t
+

2
0
0
7

<u>Item</u>	<u>Start</u>	<u>Complete</u>
MuTr FEE Prototype (wp done)	8/6	9/20
EC/EmCal survey	8/10	8/17
DOE Safety Audit (preliminary)	Done	Done
Install CM access ladder (wp needed)	8/13	8/17
Repair RXNP Phototube	8/20	8/27
Remove HBD East	8/15	8/31
Reinstall MPC North (wp needed)	8/20	8/31
Summer Sunday Tour	8/15	8/21
DOE Safety Audit (intensive)	8/20	8/31
Install CM Crane	postponed to 2008	
C-A arc flash work (no power)	8/23	8/24
Neutron shield support design & install.	8/23	9/30
Labor Day Holiday & Floating Holiday	9/3	9/4
HBD Pre survey at SB	9/17	9/21
HBD West Mechanical/Gas Reinstall	9/23	9/30
HBD EAST Mechanical/Gas Reinstall	9/24	9/30
HBD Electrical Reinstall	9/17	10/8

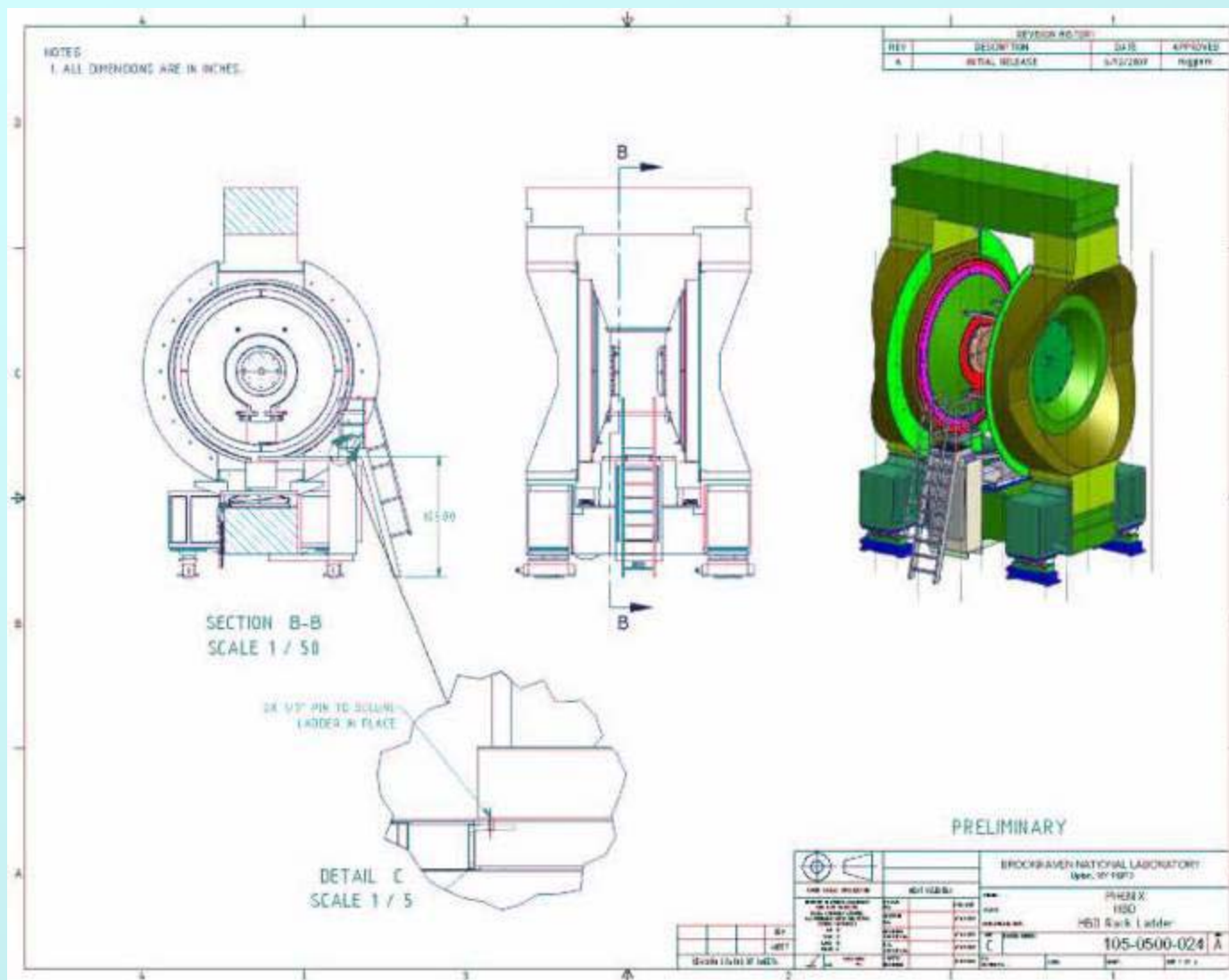
2007 Summer Shutdown Schedule (cont'd)

Move CM North	9/20	9/21
Reinstall MPC South	9/24	9/28
HBD installation survey	9/23	9/30
Reinstall MMS East Vert. Lampshade	10/1	10/5
EC Roll In	10/8	10/10
C-A fold scaffolding	10/8	10/8
Move MuID collars to IR	10/9	10/9
Roll in-to IR and North to run pos.	10/10	10/11
PHENIX techs reconnect water, elect., gas, fibers	10/12	10/19
InstaCarpenters restore scaffolding, Re-install lift & ladder, re-connect gas sniffers	10/12	10/19
Mike Rau re-install lift wiring, Re-connect TOF blower	10/12	10/19
DC East repair	10/12	10/19
HBD/MPC/Other TBD Commissioning	10/1	10/31
Start of Run 8	11/1	11/1

T
e
c
h
n
i
c
a
l
S
h
u
t
d
o
w
n
2
0
0
7

CM Ladder/Stair Shutdown Access

TECHNICAL SUPPORT NO. 105-0500-024



- PO pinned
- To be used during shutdown (EC out) only.

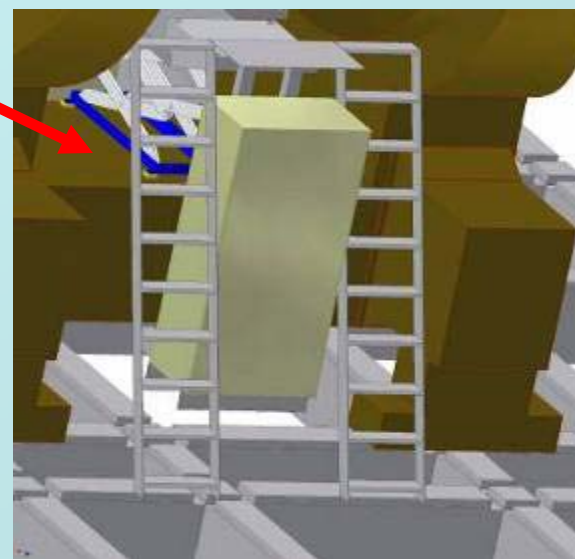
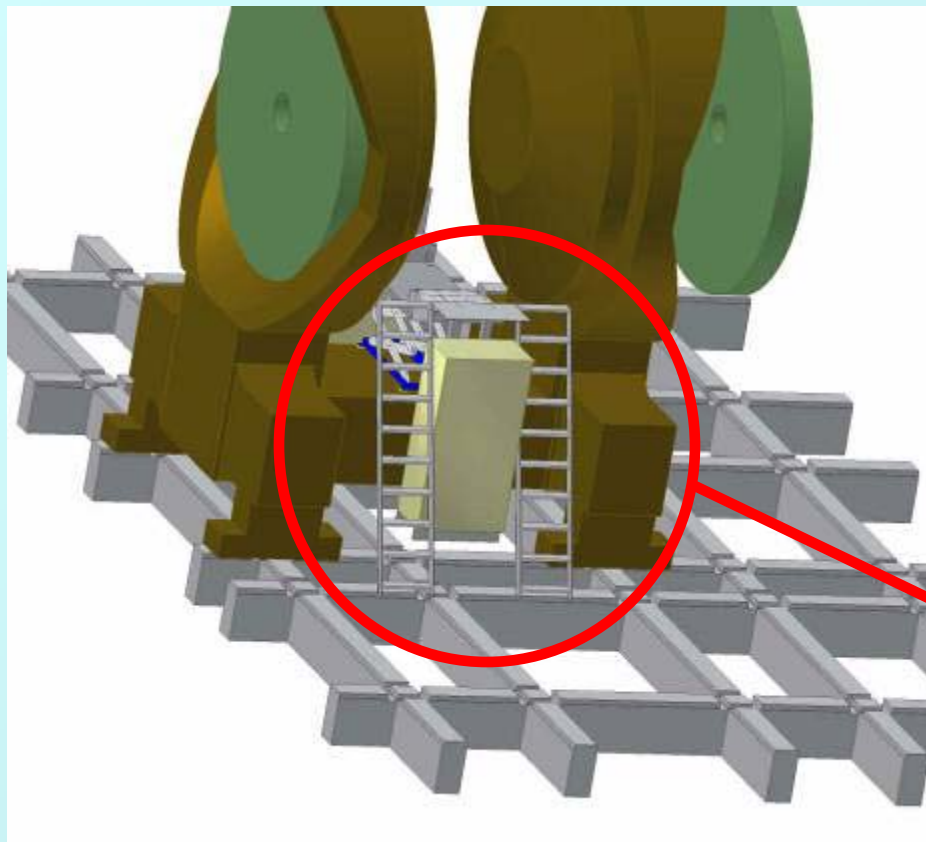
CM Ladder/Stair Run Access

Features:

60 deg. Alum ships ladder
(1 or 2) lifts off to store vertically
for run and/or to access rack
doors. (folding rail not shown)

Step up platform above rack and
cables.

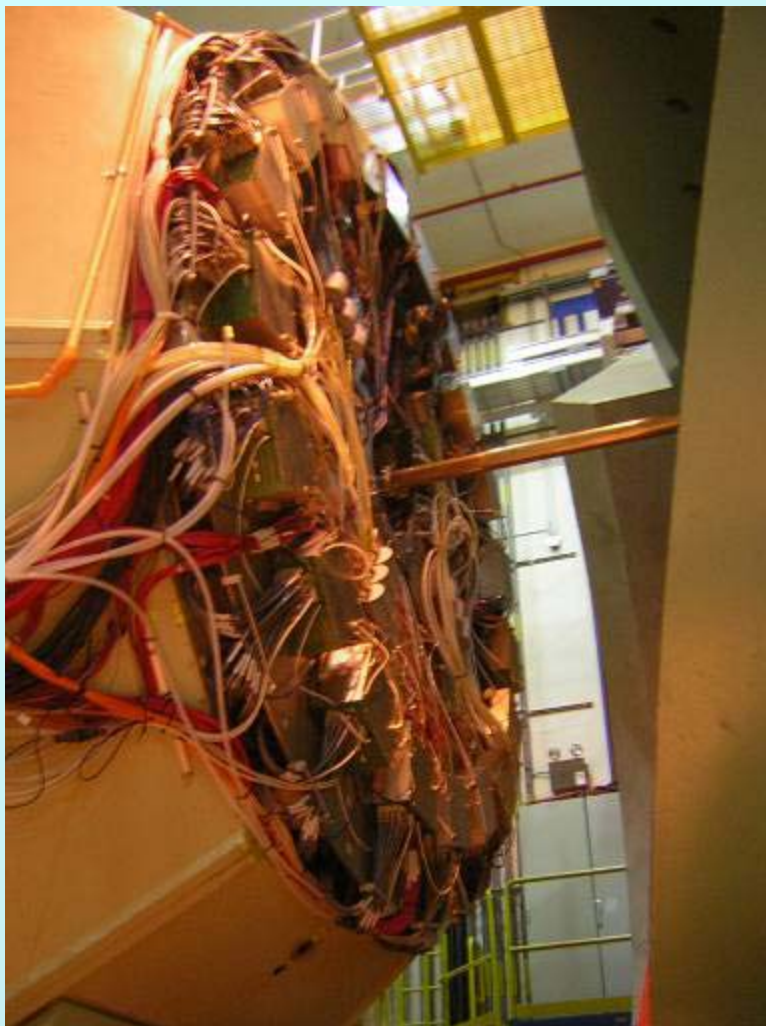
Working on modeling RICH & lead
brick interferences



T
E
C
H
N
I
C
A
L
S
U
P
P
O
R
T
+
T
O
O
L

Station 1 access plan

T
E
C
H
N
I
C
A
L
S
U
P
P
O
R
T
+
2
0
0
7



Preliminary Design
Concept:

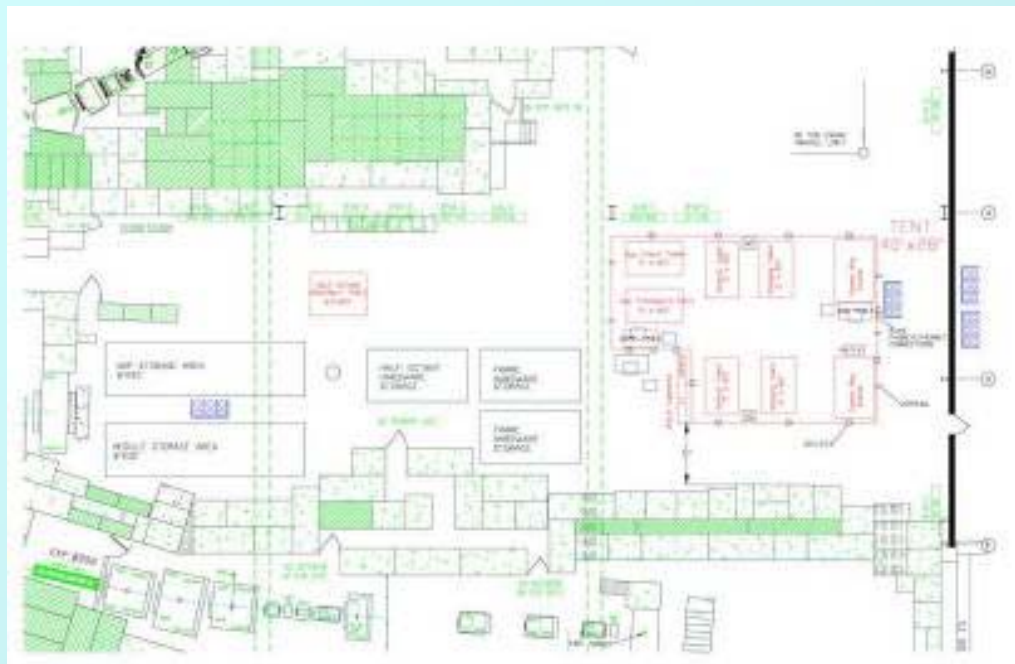
3 levels

Bottom level just below
Station 1

Mid level 2 pcs just
below MPC cavity

Top level over the beam
pipe just above MPC
cavity

RPC Factory



Work is continuing. Please make sure that all work in 912 is properly planned and approved. If in doubt consult with Don Lynch or Paul Giannotti.

T
e
c
h
n
i
c
a
l
S
u
p
p
o
r
t
+
2
0
0
7

RPC Factory Issues

T
e
c
h
n
i
c
a
l
S
u
p
p
o
r
t
+
2
0
0
7

A. Factory Set Up:

1. PHENIX tech support:

Gas: John T.

Elect: Frank T.

Mech: Kenny J.

2. Electrical work moving forward.

3. Tent power washig done, floor to be painted electrical utility work is next

4. HVAC specs 18,000 BTU AC 4 HEPA filters, internally recirculated

5. Gas distribution design in progress

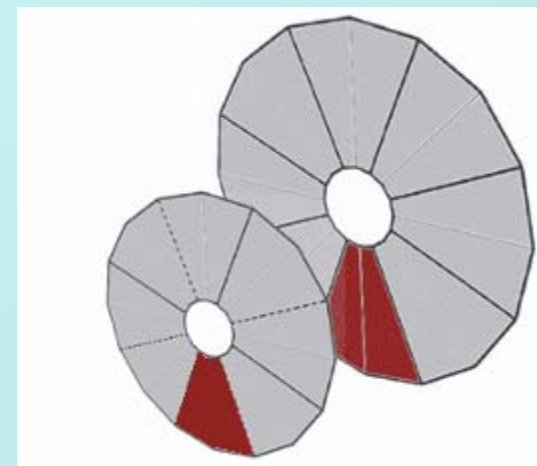
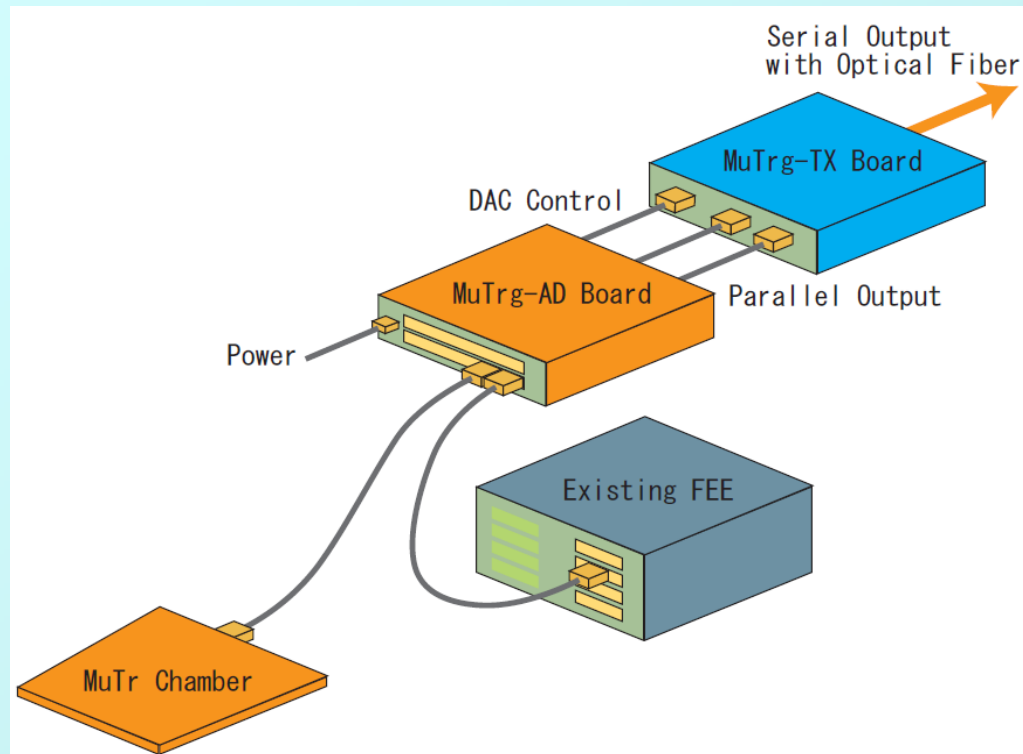
B. Safety Issues: Per Yousef's Minutes from review

- Calib./testing of SF6 monitors
- Gas system schematic in progress
- Gas system construction after approval
- Fire protection *piggy backed on 912 alarms*
- Gas environmental impact *Ralf update review numbers when gas system design is complete*
- Electronics/equipment review
- Factory users safety manual *interim Worker plan complete; final productioun version needed*

C. Factory Equipment

- Design & Fabrication (cosmic ray test stand - Kenny is working on it)
- Layout & installation shelves & cranes *not going to use, Riggers will set up A-frame*

MuTr FEE Upgrade Prototype

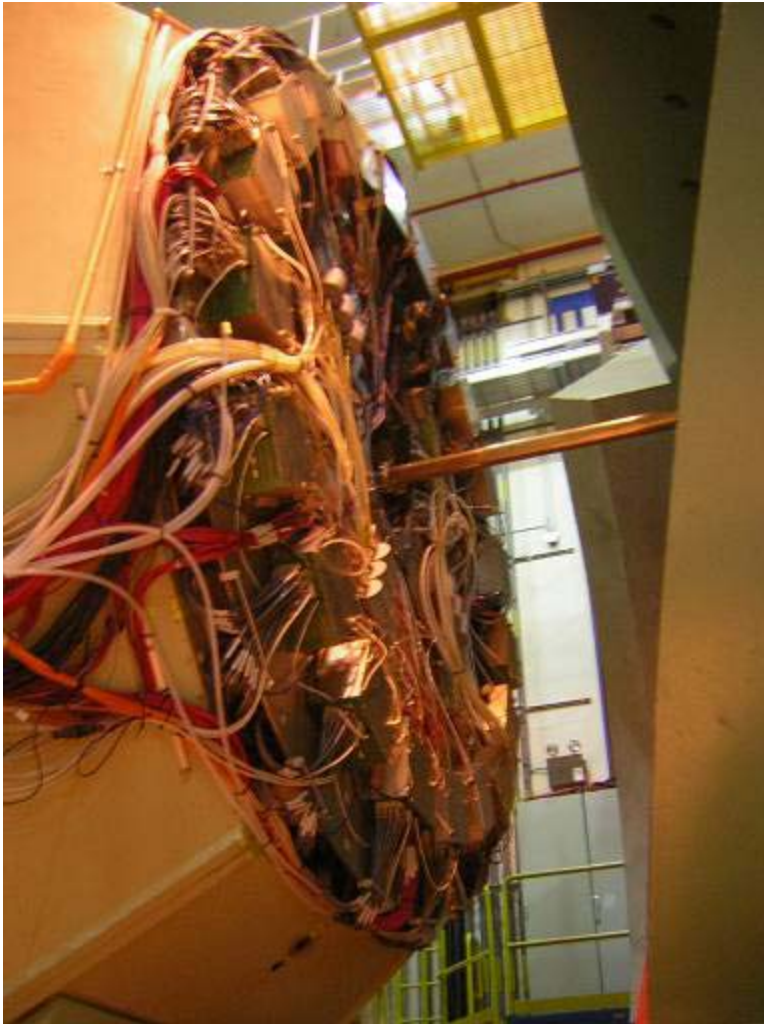


Station 2:
5 AD board Chassis
3 TX board Chassis

Station 1:
3 AD-Board Chassis
2 TX-Board Chassis

AD & TX boards arrive next week installation to begin next week. Jimmy & Kenny will help with mechanical installation; Carter & John T. will help with air & water issues; Frank T. will help With electrical & cabling

Station-1



3 AD-Board Chassis
2 TX-Board Chassis

Need to be accessible
to St-1 during test period

Need Man Lift

No plan how to mount yet

MuTr FEE Upgrade Prototype

Electrical and Gas safety issues to be resolved prior to
commencement of tests

T
e
c
h
n
i
c
a
l
S
u
p
p
o
r
t
+
2
0
0
7

Hardware Requirements

- MuID North + MuTR North (No Magnetic-field at all)
- Gas :
 - Phase-I : 8/14 - 8/23
 - MuID : CO₂
 - MuTR: Ar + CO₂
 - Phase-II: 8/23 - 9/10
 - MuID : CO₂ + C₄H₁₀ (recirculation mode)
 - MuTR: CF₄ + Ar + CO₂ (recirculation mode)
- Dry N₂: not much flow
 - Manifold + 1/4 inch tubes
- Cooling Water : not much flow
 - Manifold + 1/4 inch tubes
- Power :
 - Install 8 AD & 8 TX boards
 - $102\text{W} = 8 * 9.4\text{W}(\text{AD}) + 8 * 3.4\text{W}(\text{TX})$
 - Power from MuTr LV module
 - unused 12ch ($7.5\text{V} * 4\text{A} = 30\text{W}/\text{ch}$)
 - LV cable * 12 pairs. LV module->Octant.7 (st-1,st-2).

Schedule

- Prior to 8/6: Approval & Permits
- Aug.6 : Preparation for Installation
- Aug.13 : Start Installation
- Aug.16 : Debugging
- Aug.23 : Production data taking.
- Sept.10~20 : Finish data taking
- Sept.10~20 : Start Uninstall
- After 9/10: Test MuTr for unintended damage



Phase-I



Phase-II



- Empty (except clean metal waste) and discard old container
- VTX prototype No support until after shutdown
- NCC prototype & electronics Mike L. & Richie - Thanks Kenny & Frank for nice work on short notice

Neutron shielding test

Shield support design next week
Install in September for Run 8 tests



Safety/Security Notes:

DOE Audit this week went well. Thanks to everyone for straightening up.

This was the advance team, here to identify areas of work to be audited. Their only noted concern this week was that no work was being conducted while they were here.

The "A" team will be here for 2 weeks, 8/20 - 8/31. They want to see work in progress and assess the work planning and implementation of work controls, feedback. Etc.

They are free to go anywhere on site and they will almost certainly come to PHENIX and may stop anyone and ask questions.

Remember: All work is planned. The minimum planning is "worker planned work" and this includes all informal work discussions, i.e daily and weekly planning meetings.

Work which requires more than ordinary (low) risk factors (ESH, Complex and/or work coordination) requires a green work permit and/or written plan (procedure).

Basic rules: proper footwear in the IR, hard hats when crane is in use or working below others, safety glasses and gloves where appropriate. Only trained personnel in manlifts, machine shop, and operating cranes. All detector maintenance and upgrades in the IR should have a written plan and WP. Read and sign if you are working on any detectors in the IR.

Finally: Last man out: make sure doors are locked.

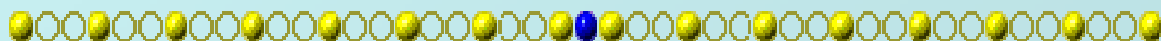
- | | |
|------|--|
| 2007 | HBD Repairs, DC (minor) repairs), MPC N&S upgrade, MuTr FEE upgrade prototype, infrastructure upgrades & repairs, misc. subsystem work |
| 2008 | MuTr FEE upgrades 1 octant 1&2 S, Cu absorber test, RPC3 S, infrastructure upgrades & repairs, misc. subsystem work |
| 2009 | Scaffolding in MMS and MMN, MuTr FEE N&S stn. 2 & 3, MuTr N&S stn. 2 & 3 repairs, RPC2 S&N, RPC3 N, Cu absorbers, infrastructure upgrades & repairs, misc. subsystem work |
| 2010 | Remove HBD & RXNP, remove beampipe, DC West upgrade, VTX barrel, RPC1 N&S, MuTr FEE stn. 1 N&S, MuTr stn. 1 N&S repairs, infrastructure upgrades & repairs, misc. subsystem work |
| 2011 | NCC S, FVTX, infrastructure upgrades & repairs, misc. subsystem work |
| 2012 | NCC N, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work |

** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2007 is to be done in the shutdown that follows run 7, and so on)*

Where To Find PHENIX Technical Info

T
E
C
H
N
I
C
A
L
S
U
P
P
O
R
T
+
2
0
0
7

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

9/9/2007

Weekly Planning Meeting